

## Product datasheet for **MG215011**

### Tpr (NM\_133780) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Tpr
Synonyms:	2610029M07Rik; C77892
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

**ORF Nucleotide Sequence:** >MG215011 representing NM\_133780  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGACCTCTGGTGGCTCGGCTTCTAGAAGTGGCCACAGAGGAGTACCCATGACATCCCGGGGTTTTGACG  
GGTCCC GCCCGGGAGTCTCAGCGCGGCAGGCGCGGAGAGACCGCGAGCGAGGCGGGCGGACGGGGCGGC  
TCCGGCGGCTGGGCTCCGCGCTTCTCCTTGCTCCTTGCTTCTCCTTCAGCCGCTGCGGCTGTTGCCGCG  
ATCCCCGGCCGACATGGCGGGGTGTGCAGCAAGTGTGGAGCGCCCGGAATGAACAACTGCCGAAGT  
CGACGCAGAACAACTTGAGAAAGTTCTGGCCGAGCAGCAGTCCGAGATCGACTGCCTGAAGGGCGCGCA  
CGAGAAATTTAAGGTGGAGAGTGAACAACAATACTTTGAGATAGAGAAGAGGCTCTCACAGAGTCAGGAG  
AGGCTTGCTCACTGAAACCCGGGAGTGTGAGAACTTGAGGCTGGAGCTTGAGAAGCTAAATAACCAAGTAA  
AAGTGTAACTGAAAAACCAAGAAGTGGAACTGCTCAAGACCGTAATCTGGGCATTGAGAGCCAGTT  
TACAAGAGCAAAGGAAGAGTTAGAAGCTGAAAAAGAGATTTAATCAGAACCAATGAGAGGTTATCTCAG  
GAAGTTGAATATTTAACAGAGGATGTTAAACGTCTAAATGAAAACTTAAAGAAAGCAATACGACGAAGG  
GTGAATTCAGTTAAAGCTGGATGAACTTCAAGCTTCTGATGTTGCTGTGAAGTATCGAGAAAAACGCTT  
AGAACAAGAAAAGGAATTGCTACACAATCAAAATTCATGGCTGAACACAGAGTTGAAAAACAAAAGTAT  
GAGCTGTTGGCTCTAGGAAGAGAAAAAGGAAATGAAATCTGGAACCTTAAAGTGAATCTTGAAAAACAAA  
AAGAAGAGGTTCTGAGACTGGAAGAACAGATGAATGGCTTGAACATCAATGAACATCTTCAGAAAAACA  
TGTAGAGGATTTGTTGACAAAATTAAGAGAGGCCAAAGAACAGCAGGCCAGTATGGAAGAGAAATCCAC  
AATGAGTTAAATGCTCACATAAAGCTCTAATCTCTACAAGAGCGCTGCTGATGACTCAGAGGCAAAGA  
GTAATGAGCTAACCCGGGCAAGTGGACGAGCTGCACAACTGCTCAAAGAAGCAGGAGAAGCCAACAAAAC  
AATACAAGATCATCTTCTACAAGTGAAGAATCTAAAGATCAGATGAAAAAGAAATGCTTGAGAAAAATA  
GGAAAAATGGAGAAGGAATTAGAGAATGCAATGACCTGCTTTCTGCTACAAAACGTAAGGAGCTATAT  
TGTCTGAAGAAGAGCTTGACAGCATGTCTCCACCGCAGCAGCTGTAGCTAAAAATTGTAAGCCTGGCAT  
GAAATTAAGTATATAATGCTTATGTGAAACTCAGGATCAGTTGCTTTTGGAAAAACAAGAAAAAT  
AAAAGGATTAATAAGTATCTGGATGAGATAGTAAAAGAAGTGAAGCCAAAGCACCATTGTAACGCC



AGCGCGAAGAGTATGAGCGTGCACAGAAAGCTGTGCCAGTCTTTCTGCAAAGCTTGAGCAAGCTATGAA  
GGAGATTGAGCGATTGCAGGAGGACTGATAAAGCCAACAAACATTTCATCGGTACTTGAAGGGACAAT  
CAGAGAATGGAAAACAAAATAAAGACCTTTCCGCAACAGATAAGAGTGCCTTTGATGGAATGGAAGAAG  
CCAGGGGTAAACCATGTAATTCGGGATGAGGAGGTCAGCTCTGCTGACATCAGTAGTTGCTGTAAGTGAT  
TTCCGAGCAGCTAGTATCTTACAGGAACATCGAAGAGCTTCAGCAGCAGAATCAGCGTCTGCTATTCCGCT  
CTTCGAGAACTTGGGAAACCAGGGAACGAGAAGAGCAAGAGACAACCTTCTCTAAGATTGCTGAACTTC  
AGCATAAATTTGAGAACTCTCTGCTGAACTGGAACAGCTCCGTGAGTCACGACAACATCAGATGCAGCT  
TGTGATTCCATAGTGCCTGAGCGTACATGTACCGAATTTATTGTCACAAAACAGGAATGGCCATT  
CCCTTACAAGCTTCAAGTTTAGATGATATTTCTTCTCTCAACTCCAAAACGTTCAAGTACATCACAGA  
CTGTTTCCACTCTGCTCCGGAACCCGTCATTGACTCCACAGAGGCTATAGAAGCAAAGGCTGCCCTTAA  
ACAGTTGCAGGAAATCTTTGAGAACTATAAAAAAGAAAAATAGACAGTGAGAACTTCAAAATGAGCAG  
CTAGAGAAAATTCAGAGCAAGTCACAGACTGCGCTCACAAAACACAAAATTTCTACTCAGTGAAGTT  
TTGCTTCTAAACGTTATGAAATGCTGCAAGATAATGTAGAAGGATATCGTCGAGAAAATAACATCTCTACA  
AGAGAGAAAACAGAACTCACTGCAACTACTCAGAAGCAGGAACAGATCATCAACACAATGACGCAAGAC  
TTGAGAGGAGCCAAATGAAAAGCTAGCAGTTGCAGAAGTAAGAGCAGAAAATTTAAGAAGGAAAAAGAAA  
TGCTTAAATTTGCTGAAAGTCCGCTTTCTCAGCAAAGAGAGTCTTTGTTAGCTGAACAGAGGGGGCAGAA  
CTTGTGCTGACTAATCTACAGACAATCCAGGGCATACTAGAGCGATCTGAGACTGAAACCAACAAAGG  
CTGAATAGCCAGATAGAAAACCTGGAGCATGAGATCTCTCACTTGAAGAAGAAATGGAAAAACGAGGTGG  
AACAAAGACATACGCTTACGAGGAATCTAGACGTTCAACTATTAGATACCAAGAGACAGCTAGATACAGA  
AATAAATCTCCATCTTAACACAAAAGAACTTTAAAAAATGCTCAGAAGGACATTGCTACACTGAAACAG  
CACCTTAATAATATGGAAGCCAGCTCGCTTCCAGTCCACACAGAGAACCAGGTAAGGTCAGCCTGGTG  
ACAGAGATGACGTTGATGATCTTAAAAGTCAGTAAGGCAGGCTGAAGAACAGGTCAATGACTTGAAGGA  
GAGACTCAAGACAAGTACCAGTAATGTGGAGCAGTATCGAGCCATGGTGACCAGCTTAGAAGATCCCTG  
AACAAAGGAGAAAACAGGTGACTGAGGAGGTTTCATAGAACATTTGAAGTTCGCTTGAAGAATCAGCAGAGT  
TTCAGACACAGTTGGAGAAGAAATGATGGAAGTAGAGAAGGAAAAGCAAGAATTCAGGATGATAAGAG  
GAAAGCCATCGAGAGCATGGAACAGCAATTAAGTGAATTTGAAGAAAACACTGTCTACTGTTGAGAATGAA  
GTACAAGAAGCTCTCAGAGAGCAAGCACAGCTTAAAGTAAATGAACAGCAAGCCAGGCGTACTGTCAGG  
AACAAAGCTAAAATCGCTGTGGAAAGCCAGAAATAAGTATGAGAGAGAATTGATGCTACATGCTGCTGATGT  
CGAAGCTCTGCAAGCTGCCAAGGAACAGGTTTCAAAAATGACATCAATCCGTCAGCATTGGAAAGAAACA  
ACTCAGAAAAGCAGAAATCCAGTTGTTGGAATGTAAGCATCTTGGGAAGAGAGAGAGAGGTTGAAAGG  
ATGAAGTTTCCAAAAGTGTCTCGCTGTGAAGATCTAGAGAAAACAAAACCGACTACTTCATGATCAAAAT  
CGAAAAATTAAGTGACAAGGTGGTCACTCTATGAAGGATGCTGTGCAAGCGCCATTAAATGTATCTCTC  
AATGAAGAAGGAAATCTCAAGAACAAATTTAGAAAATTTCTTAGATTTATTTCGACGAGAAAAAGAAATG  
CTGAAACTAGGTTTGAGGTGGCTCAGGTTGAGAGTTTGCGGTATCGACAAGAGTTGAACTTCTAGAACC  
GGAGTTGCAAGAACTGCAGGATAGCCTGAATGTGGAAGGGAAAAGGTGCAGGTAACGCAAAAACAAT  
CGCAACATGAAGAGCTGATGAAGAAAACGAAACAATGAACGTTGTTATGGAGACCAACAAGACTCTAC  
GGGAGGAAAAGGAAAGGCTCGAACAGAACCTACAACAATGCAAGCCAAGGTGAGGAAAACGGAGTTAGA  
CATTTTACCCTTACAAGAAGCCAAATGCTGAGCTGAGTGAGAAAAGCGGTATGCTCCAGGCAGAAAAGAAG  
CTACTGGAAGAGGATGTTAAGCGTTGGAAGCACGGAACCGCAACTAATAAATCAACAGAAAGATCCAG  
ACACAGAAAGATATCGAAAAGTTGCTTTCTGAAAAGGAAATTCACACTAAGAGAAATCCAACAGCTAAATGA  
AGAAAGTTGGAAGGCTTAAGGCTGAAATGCAAGATCAAAATGCATCCTTGACTAACAAACAGAAATTAATC  
CAGAGTCTGCGGGAAGACTTAAGTAAAGCACGGACTGAAAAGGAAGGCATTGAGAAAGATTTAGATGCCA  
AAATAATTGATATACAGGAAAAGGTCAAAAACAATCACTCAAGTCAAGAAAATGGACGCAGGTACAAGAC  
TCAGTTTGAAGAACTGAAAGCGCAACAAAACAAGGCCATGGAGACTTCCAATCAGTCTTCAGGAGACCAT  
CAGGAACAGCACATCTCTGTCCAGGAAATGCAAGAGCTCAAAGATACCCTCAGCCAATCCGAAAACAAGA  
CAAAGTCACTTGAGGGTCAAGTAGAGAATCTGCAGAAGACATTATCTGAAAAGAGACAGAAAGCAAGAAG  
TCTCCAGGAGCAGACGGTGCAGCTTCACTGAACTGTCACGCCTTCGTGAGGACCTCCAGGATAAAACC  
ACAGAGGAGCAGCTCCGACAGCAAAATGAATGAAAAGACTTGGAAAGACACTTGCACTAGCCAAATCAAAA  
TTACACATCTATCTGGTGTGAAAGATCAGCTGACTAAAGAAATTTGAAGAACTTAAACAAGGAACCGGAGC  
TCTAGATCAGCAGAAAGATGAGCTTGTGATGTCGCAATGACTGCTTAAAGTCCCAGTATGAAGGTCGGATT  
AGTCGCTTAGAGAGAGACTCAGAGAGCATCAAGAGCGACACTTGAGCAGAGGGATGAGCTCAAGAAC  
CCACTAATAAGGCTCCAGAACAGCAAGACAAATCACACTGAAAACCACTCCAGCTTCTGGTGAAGAGAG  
AATTGCCAGCACATCAGACCCACCAACAGCCAATATCAAGCCAACCTCTGTTGTTTCTACTCCAAGTAAA  
GTGACAGCTGCAGCTATGGCTGGGAATAAGTCGACACCCAGGGCAAGTATCCGCCAATGTTTACACCTG  
CAACGGTCAAAAATCCGACCACTACCCCAACAGCAACCGTAATGCCTACTACACAGGTGGAGTACAGGA  
AGCTATGCAGTCAGAAGGCCCTGTGGAACATGTTCCAGTATTTGAAACGCAAGTGGATCTGTTCTGTTCT

ACTAGTCCTAATGTTTCAGCCCTCCATTTCTCAGCCCATCCTAACTGTACAGCAGCAAACACAAGCTACAG  
CTTTTGTACAACCCACTCAACAGAGCCACCCGCAGATTGAGCCTACAAATCAAGAATTGCCCAACAT  
AGTTGAGGTAGTACAAAGTTCCCCAGTGGAGCGTCCATCTACTTCCACAGCAGTATTTGGCACTGTTTCA  
GCTACCCCAAGTTCCCTCTTGCCAAAGCGCACTCGGGAGGAGGAAGAGGACAGCACCATGGAAGCAGGAG  
ACCAAGTCTCTGAGGACACAGTGGAATGCCTCTCCCGAAGAAGCTGAAGATGGTCACACCCGTTGGAAC  
CGAGGAAGAAGTTATGGCAGAAGAAAGTACTGATGGAGAGGCAGAACTCAAGCCTATAATCAGGACTCT  
CAAGATTCCATTGGAGAAGGAGTTACCCAGGGAGATTATACACCAATGGAAGACAGTGAAGAAACATCAC  
AATCTCTACAAATCGATCTTGACCACTTCAGTCAGATCAACAGACTACTTCCCTCTCAAGATGGTCAAGG  
CAAAGGAGATGATGAATTGTAATTGACAGTGTATGAAGATGATGATGAAGAAAATGATGGCGAACAT  
GAAGATTATGAAGAAGCAGAAGATGATGATGATGATGAAGAAGATGACACGGGGATGGGAGATGAGGGTG  
AAGATAGTAATGAAGGAACTGGTAGTGCAGATGGTAATGATGGATATGAAGCTGATGATGCTGAGGGTGG  
TGATGGGACTGATCCAGGTACAGAAACAGAAGAAAGTATGGGTGGAGCTGAAAGTCATCAGAGAGCTGCT  
GATTCTCAAAACAGTGGTGAAGGAAATACAAGTGCAGCAGAGTCTTCTCTCTCAGGAGGTTGCCAGGG  
AACAGCAGCCACGTCAGCGTCTGAGAGACAGACTCCGCAAGCACCGCAGTCACCAAGGCGCCCTCCACA  
TCCTCTCCCCCAGCCTGACCATTACGCCCCACCTCAGGAGCTGGGACCACCAGTTCAGAGAATTCAG  
ATGACCCGGAGGCAGTCTGTAGGGCGTGGTCTTCAGTTGACTCCAGGAATAGGTGGCATGCAACAACACT  
TTTTTGATGATGAAGACAGAACAGTCCCGAGTACCCCAACTCTTGTGGTCCACATCGCACTGATGGGTT  
TGCTGAAGCTATTCATTCACACAGGTTGCCGGTGTTCCTAGATTCGGGTTGGGCCACCTGAAGACATG  
CCACAGACAAGTCCAGTCACTCTGATCTTGGCCAATTGCTTCTCAAGGAGGTTGGGAATGTATGAAA  
CACCCCTTTTTCTGGCTCATGAAGAAGAGTCTGGTGGCCGCAGCGTTCCTCACTACGCCTCTCCAAGTAGC  
AGCCCCAGTGACTGTGTTCACTGAGAGTACCACCTCTGATGCTTCAGAACATGCCTCTCAGTCGGTTCCC  
ATGGTGACAACGTCTACGGGCACCTTATCCACGACAAACGAAACAGCAGCAGGTGACGACGGAGATGAAG  
TATTTGTAGAGGCGGAGTCTGAAGTATTAGTTCAGAGGCAGGCCAGAAATTGATAGCCAGCAGGAAGA  
GGAGCCTGTCCAAGCATCTGATGAATCAGATCTTCCCTCAACCAGCCAAGATCCCCCTTCGAGCTCCTCC  
GTAGATACCAGTAGTAGTCAACCGAAGCCTTTCAGACGAGTAAGACTTCAGACAACCTTGAGACAGGGTG  
TTCGTGGTCGTCAGTTTAAACGACAAAGAGGTATAAGCCATGCAATGGGAGGAAGAGGAGGAATAAATAG  
AGGGAATATTAAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG215011 representing NM\_133780

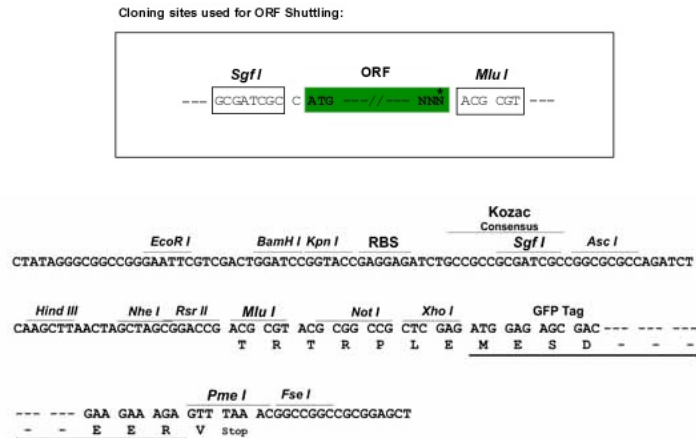
Red=Cloning site Green=Tags(s)

MTSGGSASRSRGVPMTSRFGDGSRRGSLRRAGARETASEAADGAAPAAGLRASPCSLASPSAAAAVAA  
 IPADMAAVLQQVLERPELNKLPKSTQNKLEKFLAEQQSEIDCLKGRHEKFKVESEQQYFEIEKRLSQSQE  
 RLVVETRETCQNLRLLELEKLNQVVKVLTEKTELETAQDRNLGIQSQFTRAKEELEAEKRDLIRTNERLSQ  
 EVEYLTEDVKRLNEKLEKESNTTKGELQLKLDLQASDVAVKYREKRLQEKEKLLHNQNSWLNTELKTKTD  
 ELLALGREKNEIIELEKCNLENKKEEVLRLLEEQMNGLKTSNEHLQKHVEDLLTKLKEAKEQQASMEEFH  
 NELNAHIKLSNLYKSAADDSEAKSNELTRAVDELHKLKKEAGEANKTIQDHLQVVEESKDQMEKEMLEKI  
 GKLEKELNANDLLSATKRKGAILSEELAAAMSPATAAAVAKIVKPGMKLTELNAVYVETQDQLLEKQEN  
 KRINKYLDEIVKEVEAKAPILKRQREEYERAQKAVASLSAKLEQAMKEIQRLQEDTDKANKHSSVLERDN  
 QRMEIQIKDLSQQIRVLLMELLEEARGNHVIRDEEVSSADISSSEVSIQHLVSYRNIEELQQQNQLLFA  
 LRELGETREREEQETSSKIAELQHKLENSLAELEQLRESRQHQMQLVDSIVRQRDMYRILLSTQTTGMAI  
 PLQASSLDDISLLSTPKRSSTQVSTPAPEPIDSTEAEAKAALKQLQEIFENYKKEKIDSEKLQNEQ  
 LEKLQEQTDLRSQNTKISTQLDFASKRYEMLQDNVEGYRREITSLQERNQKL TATTQKQEIQINTMTQD  
 LRGANEKLAVAEVRANLKKKEMLKLVSEVRLSQRESLLAEQRGQNLNLLTNLQTIQGILERSSETKQR  
 LNSQIEKLEHEISHLKKLENEVEQRHTLTRNLDVQLLDTKRQLDTEINLHLNTEKLLKNAQKDIATLKQ  
 HLNMEAQLASQSTQRTGKGQPGDRDDVDLKSQLRQAEQVNDLKERLKTSTSNVEQYRAMVTSLEDSL  
 NKEKQVTEEVHKNIEVRLKESAEFQTQLEKLMVEVEKEQELQDDKRKAIESMEQQLSELKKTLSVQNE  
 VQEALQRASTALSNEQQARRDCQEQAIAVEAQNKYERELMLHAADVEALQAAKEQVSKMTSIRQHLEET  
 TQKAESQLLECKASWEERERVLKDEVSKSVSRCEDEKQNRLLHDQIEKLSDKVVTSMKDAVQAPLNVSL  
 NEEGKSQEIQLEILRFIRREKIEATRFEVAQVESLRYRQVVELLERELQELQDSLNVEREKVQVTAKT  
 AQHEELMKKTETMNVVMTNMLREEKERLEQNLQMQAKVRKLELDILPLQEAELSEKSGMLQAEKK  
 LLEEDVKRWKARNQQLINQKDPDTEERYKLLSEKIEHTKRIQQLNEEVGRLKAEIARNSASLTNNQNL  
 QSLREDLKARTEKEGIQKDLDAKIIDIQEKVKTITQVKKIGRRYKTQFEELKAQQNKAMETSTQSSGDH  
 QEQHISVQEMQELKDTLSQSETKTKSLEQVENLQKTLSEKETEARSLEQETVQLQSEL SRLRQDLQDKT  
 TEEQLRQQMNEKTWKTALAKSKITHLSGVKQDLTKEIEELKQRNGALDQKDELQDVRMTALKSQQYEGRI  
 SRLERELREHQRHLEQRDEPQEPNKAPEQQRQITLKTTPASGERGIASSTDPPTANIKPTPVVSTPSK  
 VTAAMAGNKSTPRASIRPMVTPATVTNPTTTPTATVMPPTQVESQEQAMQSEGPEVHPVFGNASGSVRS  
 TSPNVQPSISQPIILTVQQQTQATAFVQPTQQSHPIEPTNQELSPNIVEVVQSSPVERPSTSTAVFGTVS  
 ATPSSSLPKRTREEEEDSTMEAGDQVSEDVEMPLPKKLMVTPVGTETEEVMAEESTDGEAETQAYNQDS  
 QDSIGEGVTQGDYTPMEDSEETSQSLQIDLGPLQSDQQTSSQDGGGKGDVIVIDSDEDDDEEDNDGEH  
 EDYEEDEDDDDDEEDDTGMGDEGEDSNEGTSADGNDGYEADDAEGGDGTDPGTETEEESMGGAESHQRAA  
 DSQNSGEGNTSAAESSFSQEVAREQQPTSASERQTPQAPQSPRRPPHPLPRLTIHAPPQELGPPVQRIQ  
 MTRRQSVGRGLQLTPGIGGMQGHFFDDEDRTVPSTPLVPHRTDGFAEAIHSPQVAGVPRFRFGPPEDM  
 PQTSSSHSDLGQLASQGLGMYETPLFLAHEEESGGRSVPTPLQVAAPVTVFTESTTSDASEHASQSV  
 MYTTSTGTLSTTNETAAGDDGDEVFVAESEGISSEAGLEIDSQEEEPVQASDESPLPSTSQDPPSSSS  
 VDTSSSQPKPFRVRLQTTLRQGVGRQFNRRQGI SHAMGGRGGINRGIN

TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_133780

**ORF Size:** 7293 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_133780.3](#), [NP\\_598541.3](#)

RefSeq Size: 7550 bp

RefSeq ORF: 7296 bp

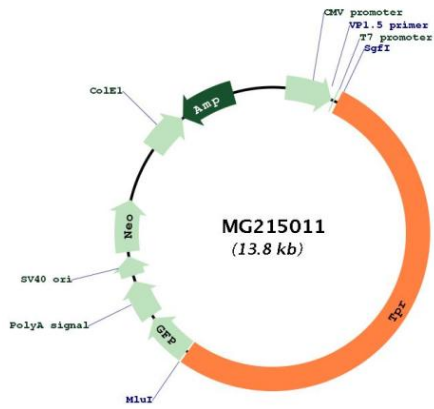
Locus ID: 108989

UniProt ID: [F6ZDS4](#)

Cytogenetics: 1 G1

**Gene Summary:** Component of the nuclear pore complex (NPC), a complex required for the trafficking across the nuclear envelope. Functions as a scaffolding element in the nuclear phase of the NPC essential for normal nucleocytoplasmic transport of proteins and mRNAs, plays a role in the establishment of nuclear-peripheral chromatin compartmentalization in interphase, and in the mitotic spindle checkpoint signaling during mitosis. Involved in the quality control and retention of unspliced mRNAs in the nucleus; in association with NUP153, regulates the nuclear export of unspliced mRNA species bearing constitutive transport element (CTE) in a NXF1- and KHDRBS1-independent manner. Negatively regulates both the association of CTE-containing mRNA with large polyribosomes and translation initiation. Does not play any role in Rev response element (RRE)-mediated export of unspliced mRNAs. Implicated in nuclear export of mRNAs transcribed from heat shock gene promoters; associates both with chromatin in the HSP70 promoter and with mRNAs transcribed from this promoter under stress-induced conditions. Plays a limited role in the regulation of nuclear protein export. Modulates the nucleocytoplasmic transport of activated MAPK1/ERK2 and huntingtin/HTT and may serve as a docking site for the XPO1/CRM1-mediated nuclear export complex. Plays also a role as a structural and functional element of the perinuclear chromatin distribution; involved in the formation and/or maintenance of NPC-associated perinuclear heterochromatin exclusion zones (HEZs). Finally, acts as a spatial regulator of the spindle-assembly checkpoint (SAC) response ensuring a timely and effective recruitment of spindle checkpoint proteins like MAD1L1 and MAD2L1 to unattached kinetochore during the metaphase-anaphase transition before chromosome congression. Its N-terminus is involved in activation of oncogenic kinases (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG215011